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(71)Applicant : NKK CORP

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(72)Inventor : ODA YOSHIHIKO

HIURA AKIRA

UEI SEISHI

TOMITA KUNIKAZU

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(54) NONORIENTED SILICON STEEL SHEET EXCELLENT IN CORE LOSS CHARACTERISTICS

(57)Abstract:

PROBLEM TO BE SOLVED: To produce a nonoriented silicon steel sheet excellent in core loss characteristics even by finish annealing at a low temp. in a short time and magnetic annealing at a low temp. in a short time.

SOLUTION: This nonoriented silicon steel sheet has a compsn. consisting of, by weight, >1 to 3.5% Si, 0.1 to 1% Al, 0.1 to 0.8% Mn, ≤0.05% Cu and ≤0.01% S, and in which the size and the number of inclusions contained therein are regulated to: those having 0.1 to 0.5μm diameter are 500 to 5000 pieces/mm<sup>2</sup> and those having >0.5μm diameter are ≤500 pieces/mm<sup>2</sup>. Furthermore, the content of C is regulated to ≤0.005%, P to ≤0.2% and N to ≤0.005%.